

REMARKS

Claims 1 through 3 have been rewritten as newly added claims 4-6. Claim 4, as compared to claim 1, more particularly points out that the claim is directed to the condenser of Applicants' invention, consistent with original claims 1-3, which includes a receiver tank having brazed end closures in both ends, as shown in Figs. 6 and 7, and page 6, lines 4-8. The claim also calls for a filter plug disposed adjacent the open end of the tube, a feature found in claim 3 as originally filed, and shown for plug 30 in Figs. 2 and 4, and described at page 5, lines 14-16.

Claims Rejection under 35 USC § 103

Claims 1-3 were rejected under 35 U.S.C. § 103 as unpatentable over United States Patent No. 6,295,832, issued to Kato et al. in 2001, in view of United States Patent No. 6,167,720, issued to Chisnell in 2001, and United States Patent No. 6,223,556, issued to De Keuster et al. in 2001.

Manufacturers of condensers have long sought a condenser having a receiver tank that may be formed in a single brazing operation without requiring subsequent assembly operations to install the desiccant and filter. This would allow both ends of the receiver tank to be sealed by brazing. Applicants have invented a condenser that fulfills this need.

Kato et al. describes a receiver tank 2 in Fig. 2, in which the jacket body 23

containing the desiccant and the filter member 22 are installed after the brazing operation, col. 6, lines 7-10. Attention is directed to the upper end closure in Fig. 2, referred to as sealing member 20, col. 6, line 6. Sealing member 20 is only generally mentioned, and the Examiner is urged to call the undersigned if the structural details are unclear. It is sufficient for present purposes to recognize that the figure shows a sealing member that comprises O-rings received in grooves of a plug. It is pointed out that a braze seal would render the O-rings superfluous, that suitable O-ring materials degrade at brazing temperatures, and that the grooves would tend to draw braze material away from desired sealing locations. Thus, the practitioner would perceive that the end closure is designed to allow the desiccant material in body 23 and the filter member 22 to be assembled after the brazing operation. In contrast, Applicants' condenser comprises a desiccant cartridge assembly that is installed prior to brazing, and brazed end closures that seal the desiccant cartridge assembly within the receiver tank. Kato et al. does not contemplate desiccant and filter sealed within the receiver tank by brazed end closures, and so cannot teach or suggest Applicants' condenser.

The secondary references also fail to show these features. Chisnell is cited to show a desiccant material capable of withstanding brazing temperatures. However, Chisnell discloses an accumulator, and does not teach or suggest a condenser that is integrally formed, including with the brazed ends of the receiver tank. Also, it is pointed out that Applicants also disclose a filter material that withstands the brazing process, something not shown in Chisnell, nor in Kato et al. De Keuster et al. is cited to show a

receiver 22 that includes a brazed end plug 69. However, De Keuster et al. also discloses a removable plug 64 specifically designed to allow the desiccant and filter to be installed after assembly of the receiver/condenser, see col. 4, lines 16-24. In this regard, it is pointed out that De Keuster et al. utilizes o-ring seals 96, like Kato et al., col. 5, line 64, to col. 6, line 3. This is in marked contrast to Applicants' condenser that comprises end closures brazed at both ends, with the desiccant and filter sealed inside. Thus, the references only show condensers that are designed to allow post-braze access to install the desiccant and filter into the receiver. Nothing in the references points the practitioner to a desiccant cartridge assembly that contains the desiccant and filter, is installed into the receiver tank prior to brazing, and then sealed therein by brazed end closures. Without these features, the references cannot lead the practitioner to Applicants' invention.

Claim 4 is directed to Applicants' condenser that includes a receiver tank attached to a header tank. The receiver tank comprises a tubular structure having end closures brazed to both ends. The condensers in Kato et al. and De Keuster et al. are designed with at least one end that is not brazed, so that it may be attached after the brazing operation. The claim calls for a desiccant cartridge assembly that is installed prior to brazing, and includes, in addition to other key elements, the desiccant and filter plug. Kato et al. and De Keuster design condensers specifically for post-braze desiccant and filter installation. Nor does the accumulator in Chisnell suggest these features for a condenser. Thus, the combined references do not lead the practitioner to Applicants' condenser as set forth in claim 4.

Claims 5 and 6 are dependent upon claim 4, and are not taught or suggested by the references for the reasons set forth with regard to that claim, but recite additional features preferred in the practice of Applicants' invention.

Accordingly, it is respectfully requested that the rejection of the claims based upon Kato et al., Chisnell and/or De Keuster et al. be reconsidered and withdrawn, and that the claims be allowed.

Conclusion

It is believed, in view of the amendments and remarks herein, that all grounds of rejection of the claims have been addressed and overcome, and that all claims are in condition for allowance. If it would further prosecution of the application, the Examiner is urged to contact the undersigned at the phone number provided.

The Commissioner is hereby authorized to charge any fees associated with this communication to Deposit Account No. 50-0831.

Respectfully submitted,



Douglas D. Fekete
Reg. No. 29,065
Delphi Technologies, Inc.
Legal Staff – M/C 480-410-202
P.O. Box 5052
Troy, Michigan 48007-5052

(248) 813-1210